

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) ~~Method~~ A method for three-dimensional detection of objects (3), ~~in which~~ comprising:

~~[[-]]~~ projecting a color pattern (5) with known projection data ~~is projected~~ onto the object to be detected (3) ~~[[,]]~~;

~~[[-]]~~ recording the color pattern (5) projected onto the object (3) ~~is recorded~~ with a camera (6) ~~[[,]]~~; and

~~[[-]]~~ processing the image (7) recorded by the camera (6) ~~is processed~~ in an analysis unit (9) into three-dimensional object coordinates of the object (3),

~~characterized in that,~~ wherein

 the projection data in the color pattern (5) is encoded with the aid of [[a]] redundant code, and color changes of the color pattern (5) are structured with the aid of codewords of redundant code and in which, during analysis in the analysis unit (9), the codewords are allowed corresponding color changes as valid color changes.

2. (currently amended) ~~Method~~ The method in accordance with Claim 1, ~~in which~~ wherein color values in the color pattern (5) are structured with the aid of codewords of $[[a]]$ redundant code and in which the projection data of a point (P) of the image (7) are identified with the aid of a search performed by the analysis unit (9) for the codewords encoding the color values.

3. (canceled)

4. (currently amended) ~~Method~~ The method in accordance with Claim 2, ~~in which~~ wherein codewords with a non-trivial Hamming distance are used.

5. (currently amended) ~~Method~~ The method in accordance with Claim 2, in which the codewords are arranged so that they overlap.

6. (currently amended) ~~Method~~ The method in accordance with Claim 1, ~~in which~~ wherein the color values are varied in each color channel between two values.

7. (currently amended) ~~Method~~ The method in accordance with Claim 6, ~~in which~~ wherein the color values are varied in each color channel between a minimum value and a maximum value.

8. (currently amended) ~~Method~~ The method in accordance with Claim 1, ~~in which~~ wherein the color values are changed in at least two channels together and in which color changes occurring in at least two color channels are allowed as valid color changes during analysis in the analysis unit (9).

9. (currently amended) ~~Method~~ The method in accordance with Claim 1, ~~in which,~~ wherein in each color channel within each codeword at least one color change is performed.

10. (currently amended) ~~Method~~ The method in accordance with Claim 1, ~~in which~~ wherein in the analysis unit (9) the position of color changes in each color channel is determined with the aid of extreme values of a first derivation (12) of a measurement signal (11).

11. (currently amended) ~~Method~~ The method in accordance with Claim 1, ~~in which~~ wherein the color pattern (5) is formed as stripes and in which, during analysis in the analysis unit (9), color changes corresponding to each other are combined into profile lines (15).

12. (currently amended) ~~Method~~ The method in accordance with Claim 1, ~~in which~~ wherein an individual recording of the

image (7) for determining the three-dimensional coordinates of the surface (2) of the object (3) is performed.

13. (currently amended) ~~Method~~ The method in accordance with Claim 1, ~~in which,~~ wherein by evaluating the color of the color pattern (5) recorded in the image (7) and the color originally projected in the color pattern (5) a coloring of the surface (2) of the object (3) is reconstructed.

14. (currently amended) ~~Device~~ A device for three-dimensional detection of objects with a projector (4) to project a color pattern (5) onto a surface (2) of an object to be recorded (3) and with a camera (6) to record an image (7) of the color pattern (5) projected onto the surface (2), as well as with an analysis unit (9) for analyzing the image (7), ~~characterized in that~~ wherein the color pattern (5) that can be projected by the projector (4) and the analysis unit (9) are set up to execute the method in accordance with Claim 1.

15. (currently amended) ~~Method~~ A method in accordance with Claim 1 for recognizing [[the]] faces of people.

16. (currently amended) ~~Method~~ A method in accordance with Claim 1 for recognizing [[the]] gestures of people.

17. (currently amended) ~~Method~~ The method in accordance with Claim 2, ~~in which~~ wherein color changes of the color pattern (5) are structured with the aid of codewords of a redundant code and in which, during analysis in the analysis unit (9), the codewords are allowed corresponding color changes as valid color changes.

18. (currently amended) ~~Method~~ The method in accordance with Claim 3, ~~in which~~ wherein codewords with a non-trivial Hamming distance are used.

19. (currently amended) ~~Method~~ The method in accordance with Claim 3, ~~in which~~ wherein the codewords are arranged so that they overlap.

20. (currently amended) ~~Method~~ The method in accordance with Claim 4, ~~in which~~ wherein the codewords are arranged so that they overlap.